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| TRANS | SMITTAL | Application Number | 09/993,045 | | |
| FC | ORM | Filing Date | November 13, 2001 | | |
| | | First Named Inventor | Timothy R. BRAZELTON | | |
| | | Group Art Unit | 1614 | | |
| (to be used for all corre- | spondence after initial filing) | Examiner Name | To Be Assigned | | |
| Total Number Of Pages In Th | nis Submission 10 + 32 Refs. | Attorney Docket No. | 286002021300 | | |
| | ENCLOS | SURES (check all that | apply) | | |
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| Fee Attache | d Dra | awing(s) | Appeal Communication to Board of Appeals and Interferences | | |
| Amendment / Reply | Lic | ensing-related Papers | Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) | | |
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| Extension of Time F | | wer of Attorney, Revocation ange of Correspondence Add | Other Enclosure(s) (please identify below): | | |
| Express Abandonment Request | | rminal Disclaimer quest for Refund | Form PTO-1449 (3 pages in duplicate) 32 cited references Return receipt postcard | | |
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| SIGNATURE OF APPLICANT, ATTORNEY OR AGENT | | | | | |
| Firm | Morrison & Foerster LLP, 755 Pag | | | | |
| or Individual Name | Shantanu Basu, Reg. No. 43,318 | | | | |
| Signature | Then Son A | | | | |
| Date | March 4, 2002 | | | | |
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Timothy R. BRAZELTON and Helen M.

Serial No.: 09/993,045

Filing Date: November 13, 2001

For: METHODS FOR TREATING

DISORDERS OF NEURONAL DEFICIENCY WITH BONE MARROW-

DERIVED CELLS

Examiner: To Be Assigned

Group Art Unit: 1614

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97

Assistant Commissioner for Patents Washington, D.C. 20231

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, Applicants submit for consideration in the above-identified application the documents listed on the attached Form PTO-1449. Copies of the documents are also submitted herewith. The Examiner is requested to make these documents of record.

This Information Disclosure Statement is submitted: With the application; accordingly, no fee or separate requirements are required. \boxtimes Within three months of the application filing date or before mailing of a first Office Action on the merits; accordingly, no fee or separate requirements are required. After receipt of a first Office Action on the merits but before mailing of a final Office Action or Notice of Allowance. A fee is required. A check in the amount of * is enclosed. A fee is required. Accordingly, a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate. A Certification under 37 C.F.R. § 1.97(e) is provided below; accordingly; no fee is believed to be due. After mailing of a final Office Action or Notice of Allowance, but before payment of the issue fee. П A Certification under 37 C.F.R. § 1.97(e) is provided below and a check in the amount of * is enclosed. A Certification under 37 C.F.R. § 1.97(e) is provided below and a Fee Transmittal form (PTO/SB/17 is attached to this submission in duplicate.

Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

The information contained in this Information Disclosure Statement under 37 C.F.R. § 1.97 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorizes the Assistant Commissioner to

charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing 286002021300. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: March 4, 2002

Respectfully submitted,

Shantanu Basu

Registration No. 43,318

Morrison & Foerster LLP

755 Page Mill Road Palo Alto, California 94304-1018 Telephone: (650) 813-5995

Facsimile: (650) 494-0792

| Form PTO-1449 | | | Docket Number 286002021300 | | Application Number 09 99,045 | | | | |
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| INFORMATION DISCLOSURE CITATION | | | Applicant | | | | | | |
| IN AN APPLICATION | | | Timothy R. BRAZELTON and Helen M. BLAU | | | | A | | |
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| | $\overline{}$ | | U.S. PA | TEN | Γ DOCUMENTS | | | | |
| Examiner Initials | Ref. No. | ATENDATARA | Document No. | | Name | Class | Subclass | Filing I Appro | |
| | 1. | 02/16/1993 | 5,187,193 | Bor | ch et al. | | | | |
| * | 2. | 07/30/1996 | 5,541,107 | Naughton et al. | | | | | |
| | 3. | 12/01/1998 | 5,843,438 | ├ | ayannopoulou | | | | |
| | 4. | 07/20/1999 | 5,925,568 | Con | ner et al. | | | | |
| Examiner Initials | Ref. No. | Date | FOREIGN I | PATE | ENT DOCUMENT Country | Class | Subclass | Transl | ation .NO |
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| Examiner Initials | Ref. No. | Title | | - | | | | | |
| | 5. | Ambler, M.W. et al. (1983). "Infantile osteopetrosis and neuronal storage disease," <i>Neurology</i> 33(4):437-441. | | | | | | | |
| | 6. 🕦 | Anderlini, P. and Körbling, M. (1997). "The use of mobilized peripheral blood stem cells from normal donors for allografting," <i>Stem Cells</i> 15:9-17. | | | | | | | |
| | 7. 0 | Ausubel, F.M. et al. eds., (1987). <u>Current Protocols in Molecular Biology</u> , John Wiley and Sons, Inc.: New York, pp.1-11 (Table of Contents). | | | | | | | |
| | 8. 3 | Baker, G.A. et al. (1991). "The development of a seizure severity scale as an outcome measure in epilepsy," <i>Epilepsy Res.</i> 8(3):245-251. | | | | | | | |
| | 9. 、 | Brazelton, T.R. et al. (2000). "From marrow to brain: expression of neuronal phenotypes in adult mice," <i>Science</i> 290(5497):1775-1779. | | | | | | | |
| | 10. Chao, N.J. et al. (1993). "Granulocyte colony-stimulating factor 'mobilized' peripheral blood progenitor cells accelerate granulocyte and platelet recovery after high-dose chemotherapy," <i>Blood</i> 81(8):2031-2035. | | | | | | | | |
| | 11. 0 | Duncan, J.S. and Sander, J.W. (1991). "The Chalfont Seizure Severity Scale," J. Neurol. Neurosurg. Psychiatry. 54(10):873-876. | | | | | | | |
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| - Hillion | Š | | • | <u> </u> | | | |
| PENT & THEO | a | Eglitis, M.A. and Mezey, E. (1997). "Hematopoietic cells differentiate into both microglia and macroglia in the brains of adult mice," <i>Proc. Natl. Acad. Sci. USA</i> 94(8):4080-4085. | | | | | |
| 13. | i | Freshney, R.I. (1986). Animal Cell Culture, a practical approach, IRL Press: Oxford, pp. vii-xiii (Table of Contents). | | | | | |
| 14. | Ç | Gage, F.H. et al. (1987). "Grafting genetically modified cells to the brain: possibilities for the future," <i>Neuroscience</i> 23(3):795-807. | | | | | |
| 15. | 4 | Graham, D.I. and Lantos, P.L. eds. (1997). <u>Greenfield's Neuropathology, sixth edition</u> , Oxford University Press: New York pp. v-xiii (Table of Contents). | | | | | |
| 16. | v | Gussoni, E. et al. (1999). "Dystrophin expression in the <i>mdx</i> mouse restored by stem cell transplantation," <i>Nature</i> 401(6751):390-394. | | | | | |
| 17. | 1 | Harada, M. et al. (1996). "Granulocyte colony-stimulating factor-induced mobilization of peripheral blood stem cells for autologous and allogenic transplantation," <i>Cancer Chemother. Pharmacol.</i> 38(Suppl): S115-S119. | | | | | |
| 18. | 8 | Harlow, E. and Lane, D. eds. (1988). Antibodies: A Laboratory Manual, Cold Spring Harbor Laboratory: New York pp.iii-ix (Table of Contents). | | | | | |
| 19. | a | Howell, J.M. et al. (1991). "Natural bone marrow transplantation in cattle with Pompe's disease," <i>Neuromuscul. Disord.</i> 1(6):449-454. | | | | | |
| 20. | 1 | Kennedy, D.W. and Abkowitz, J.L. (1997). "Kinetics of central nervous system microglial and macrophage engraftment: analysis using a transgenic bone marrow transplantation model," <i>Blood</i> 90(3):986-993. | | | | | |
| 21. | O | Körbling, M. (1999). "Collection of allogeneic peripheral blood stem cells," <i>Bailliere's Clinical Haematology</i> 12(1/2):41-55. | | | | | |
| 22. | . & | Krivit, W. et al. (1999). "Bone marrow transplantation for globoid cell leukodystrophy, adrenoleukodystrophy, metachromatic leukodystrophy, and Hurler syndrome," <i>Curr. Opin. Hematol.</i> 6(6):377-82. | | | | | |
| 23. | . \ | Kronenwett, R. et al. (2000). "The role of cytokines and adhesion molecules for mobilization of peripheral blood stem cells," <i>Stem Cells</i> 18:320-330. | | | | | |
| 24 | . 1 | McPherson, M.J. et al eds. (1995). PCR 2:A Practical Approach, IRL Press: Oxford, pp. ix-xvii. (Table of Contents). | | | | | |
| 25 | J | Petersen, B.E. et al. (1999). "Bone marrow as a potential source of hepatic oval cells," <i>Science</i> 284(5417):1168-1170. | | | | | |
| 26 | . , | Pourcher, E. and Barbeau, A. (1980). "Field testing of an ataxia scoring and staging system," Can. J. Neurol. Sci. 7(4):339-344. | | | | | |
| 27 | . `` | Sadock, B.J. and Sadock, V.A. eds. (2000). <u>Kaplan and Sadock's Comprehensive Textbook of Psychiatry, Volume 1</u> , Lippincott Williams and Wilkins: Philadelphia, pp. vii-xviii (Table of Contents). | | | | | |
| EXAMINER | : | | DATE CONSIDERED: | | | | |
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| | | | | 90 | | |
| | 28. | Sambrook, J. et al. (1989). Molecular Cloning: A Laboratory Manual, second edition, Cold Spring Harbor Laboratory Press: New York, pp. xi-xxxviii. (Table of Contents). | | | | |
| | 29. © | Scherer, L.J. et al. (1992). "Human Dopa decarboxylase: localization to human chromosome 7p11 and characterization of hepatic cDNAs," <i>Genomics</i> 13(2):469-471. | | | | |
| | 30. d | Tabbara, I.A. et al. (1997). "The role of granulocyte colony-stimulating factor in hematopoietic stem cell transplantation," <i>Cancer Investigation</i> 15(4):353-357. | | | | |
| | 31. | Takahashi, K. et al. (1990). "Infantile Pathol. Res. Pract. 186:697-706. | osteopetrosis complicating neu | ronal ceroid lipofuscinosis," | | |
| | 32. ų | Wolff, J.A. et al. (1989). "Grafting for Parkinson disease," Proc. Natl. Ac | | | | |



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